Pengaruh Perbedaan Lama Ekstraksi Ampas Kopi Kawa Daun (*Coffea cannephora*) Menggunakan Ultrasonik Bath Terhadap Komponen Bioaktif Ekstrak

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ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh perbedaan lama ekstraksi ampas kopi kawa daun dan mengetahui lama ekstraksi terbaik pada ampas kopi kawa daun menggunakan ultrasonik bath terhadap komponen bioaktif ekstrak. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) terdiri dari 5 perlakuan lama ekstraksi (10, 15, 20, 25 dan 30 menit) dan 3 kali ulangan. Data dianalis secara statistik dengan menggunakan *Analysis of Varian* (ANOVA) dan dilanjutkan dengan *Duncan's New Multiple Range* Test (DNMRT) pada taraf 5%. Pengamatan ekstrak ampas kopi daun yang dilakukan adalah analisis rendemen, sisa pelarut, total polifenol, aktivitas antioksidan dan kadar kafein. Hasil penelitian menunjukan bahwa perbedaan lama ekstraksi ampas kopi kawa daun menggunakan ultrasonik bath berpengaruh nyata terhadap rendemen, total polifenol, aktivitas antioksidan dan kadar kafein, namun tidak berpengaruh nyata terhadap sisa pelarut ekstrak ampas kopi kawa daun yang dihasilkan. Lama ekstraksi terbaik pada ampas kopi kawa daun menggunakan ultrasonik bath adalah perlakuan C (lama ekstraksi 20 menit) dengan rendemen (28,60%), total polifenol (247,361 mgGAE/g), aktivitas antioksidan (24,61%), kadar kafein (0,21%) dan sisa pelarut (0,00%).

Kata kunci - ampas kopi kawa daun, ultrasonik bath, bioaktif.

The Effect on The Different Extraction Time of Coffee Leaves *(Coffea cannephora)* Waste Which Use Ultrasonic Bath Towards Components of Bioactive Extract

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ABSTRACT

This research aims to know the effect on the different extraction time of coffee leaves *(Coffea cannephora)* waste and to determine the best extraction time of coffee leaves waste which use ultrasonic bath towards components of bioactive extract. This research used Completely Randomized Design (CRD) consists of 5 treatments of extraction time (10, 15, 20, 25 and 30 minutes) and 3 repetitions. Data analyzed statistically by Analysis of Varian (ANOVA) and continued by Duncan's New Multiple Range Test (DNMRT) at 5% significant level. The observation of coffee leaves waste extract were yield analysis, residual solvents, total polyphenols, antioxidants activities and caffeine contents. The result showed the different extraction time of coffee leaves waste which use ultrasonic bath were significantly effected to yield analysis, total polyphenols, antioxidants activities and caffeine contents, but the result was not significantly effected to residual solvents. The best extraction time of coffee leaves waste which use ultrasonic bath was treatment C (extraction time of 20 minutes) with yield (28,60 %), total polyphenols (247,361 mgGAE/g), antioxidants activities (24,61%), caffeine contents (0,21%) and residual solvents (0,00%).

Keywords : coffee leaves waste, ultrasonic bath, bioactive